



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,695	01/10/2002	Rotem Cooper	010110	7705
23596 7590 01/07/2009 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
IQBAL, KHAWAR				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
01/07/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

kascanla@qualcomm.com

nanm@qualcomm.com

Office Action Summary

Application No.

10/043,695

Applicant(s)

COOPER, ROTEM

Examiner

KHAWAR IQBAL

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-11-08 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mazzara (20030087642) in view of Bamburak et al (6195532) and Huilgol (6801762).

Regarding claim 1 Mazzara teaches in a mobile station including a preferred roaming list, a system acquisition procedure comprising the steps of (figs.1-3):

maintaining a list of unusable (non-preferred system) wireless communications systems, each entry of a wireless communication system in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion for not using the wireless communication system, wherein at least one of said unusable wireless communications systems is included on the preferred roaming list

(system access list part of a preferred roaming list) (para. # 0037, 0040, 0052-0056, and 0063);

selecting a wireless communications system from the preferred roaming list of wireless communication system in accordance with a predetermined system acquisition sequence, each entry of a wireless communication system in the preferred roaming list including system identifier (para. # 0040-0041);

determining whether the selected wireless communication system from the preferred roaming list is a useable wireless communication system or an unusable wireless communication system (para. # 0040-0041, 0044 and 0049-0052);

attempting to acquire and register with the selected wireless communications system when the selected wireless communication system is determined to be a useable wireless communication system (para. # 0049-0052);

repeating the step of selecting when the selected communication system is determined to be an unusable wireless communication system (para. # 0054 see above);

wherein the selected wireless communications system is determined to be an unusable wireless communication system when a system identifier for the selected wireless communication matches a system identifier in the list of unusable wireless communications systems and when avoidance criterion corresponding to the system identifier in the list of unusable wireless communication system is satisfied (para. # 0040-0041, 0044 and 0049-0052, 0054-56). Mazzara does not specifically teach

repeating the step of selecting, before attempting to acquire and register with the selected wireless communications system.

In the same field of endeavor, Bamburak et al teaches repeating the step of selecting, before attempting to acquire and register with the selected wireless communications system (col. 5, lines 15-60, col. 7, lines 1-35, col. 9, line 54-col. 10, line 39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara by specifically adding feature repeating the step of selecting, before attempting to acquire and register with the selected wireless communications system in order to enhance system performance to continuous to locates acceptable service provider in no optimal providers are found as taught by Bamburak et al. The combination of Mazzara and Bamburak et al do not specifically teach in detail corresponding avoidance criterion that is equal to a current time plus avoidance duration time for not using the wireless communications system.

In the same field of endeavor, Huilgol teaches corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system (col. 3, line 66-col. 4, line 5, col. 7, lines 24-41, col. 8, line 46-col. 9, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara and Bamburak et al by specifically adding feature corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system in order to enhance system performance, the possibility of in completion of call is reduced, by increasing the communication system in which the call

is attempted, thereby reducing call congestion, or other communication difficulties in the system as taught by Huilgol.

Regarding claim 12 Mazzara teaches in a mobile station, a method for marking wireless communications systems as unusable wireless communications systems comprising the steps of (figs. 1-3):

maintaining a list of unusable wireless communications systems, each entry of a wireless communications systems in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion for not using the wireless communication system (para. # 0037, 0040, 0052-0056, and 0063);

selecting a wireless communications system from a preferred roaming list (para. # 0037, 0040, 0052, and 0055);

detecting a communications failure associated with a wireless communications system selected from the preferred roaming list (para. # 0037, 0040, 0052, 0055); and adding a record to the list of unusable wireless communications systems, the added record including an identifier of the wireless communications system selected from the preferred roaming list system and corresponding avoidance criterion based on the detected communications failure, wherein the wireless communications system is selected from the preferred roaming list but is unusable while the corresponding avoidance criterion is satisfied (para. # 0037, 0040, 0052, 0055-0056, 0063). Mazzara does not specifically teach which is determined before attempting to acquire and register with the selected wireless communications system.

In the same field of endeavor, Bamburak et al teaches which is determined before attempting to acquire and register with the selected wireless communications system. (col. 5, lines 15-60, col. 7, lines 1-35, col. 9, line 54-col. 10, line 39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara by specifically adding feature repeating the step of selecting, before attempting to acquire and register with the selected wireless communications system in order to enhance system performance to continuous to locates acceptable service provider in no optimal providers are found as taught by Bamburak et al. The combination of Mazzara and Bamburak et al do not specifically teach in detail corresponding avoidance criterion that is equal to a current time plus avoidance duration for not using the wireless communications system.

In the same field of endeavor, Huilgol teaches corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system (col. 3, line 66-col. 4, line 5, col. 7, lines 24-41, col. 8, line 46-col. 9, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara and Bamburak et al by specifically adding feature corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system in order to enhance system performance, the possibility of in completion of call is reduced, by increasing the communication system in which the call is attempted, thereby reducing call congestion, or other communication difficulties in the system as taught by Huilgol.

Regarding claim 17 Mazzara teaches a mobile station comprising (figs. 1-3):

a memory storing a preferred roaming list of wireless communications systems, the preferred roaming list including a first plurality of system identifiers and corresponding acquisition parameters for corresponding unusable wireless communications systems (para. # 0044-45 see above); and

processing circuitry adapted to create and maintain a list of unusable wireless communications systems, the list of unusable wireless communications systems being stored in the memory and including a second plurality of system identifiers and corresponding avoidance criterion for not using corresponding unusable wireless communications systems, communications systems, wherein at least one of said unusable wireless communications systems is included on the preferred roaming list (para. # 0037,0040, 0052, 0055-0056,0063),

wherein a selected wireless communications system from the preferred roaming list is determined to be an unusable wireless communications systems when a system identifier for the selected wireless communication system matches a system identifier in the list of unusable systems and the avoidance criterion corresponding the system identifier in the list of unusable wireless communication system is satisfied (para. # 0052-56 see above). Mazzara does not specifically teach before attempting to acquire and register with the selected wireless communications system.

In the same field of endeavor, Bamburak et al teaches before attempting to acquire and register with the selected wireless communications system (col. 5, lines 15-60, col. 7, lines 1-35, col. 9, line 54-col. 10, line 39). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara by specifically adding feature repeating the step of selecting, before attempting to acquire and register with the selected wireless communications system in order to enhance system performance to continuous to locates acceptable service provider in no optimal providers are found as taught by Bamburak et al. The combination of Mazzara and Bamburak et al do not specifically teach in detail corresponding avoidance criterion that is equal to a current time plus avoidance duration for not using the wireless communications system.

In the same field of endeavor, Huilgol teaches corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system (col. 3, line 66-col. 4, line 5, col. 7, lines 24-41, col. 8, line 46-col. 9, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara and Bamburak et al by specifically adding feature corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system in order to enhance system performance, the possibility of in completion of call is reduced, by increasing the communication system in which the call is attempted, thereby reducing call congestion, or other communication difficulties in the system as taught by Huilgol.

Regarding claim 22 Mazzara teaches a processor readable media for storing instructions operable in a wireless device to:

maintaining a list of unusable (non-preferred system) wireless communications systems, each entry of a wireless communication system in the list of unusable wireless communications systems including a system identifier and corresponding avoidance criterion for not using the wireless communication system, wherein at least one of said unusable wireless communications systems is included on the preferred roaming list (para. # 0037, 0040, 0052-0056, and 0063);

selecting a wireless communications system from the preferred roaming list of wireless communication system (para. # 0040-0041);

determining whether the selected wireless communication system from the preferred roaming list is a useable wireless communication system or an unusable wireless communication system, wherein the selected wireless communication system is determined to be an unusable wireless communication system when the selected wireless communication system is included in the list of unusable wireless communication systems and when the corresponding avoidance criterion is satisfied (para. # 0037,0040, 0052, 0055-0056,0063);

attempting to acquire and register with the selected wireless communications system when the selected wireless communication system is determined to be a useable wireless communication system (para. # 0049-0052, see above). Mazzara does not specifically teach before attempting to acquire and register with the selected wireless communications system.

In the same field of endeavor, Bamburak et al teaches attempting to acquire and register with the selected wireless communications system (col. 5, lines 15-60, col. 7,

lines 1-35, col. 9, line 54-col. 10, line 39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara by specifically adding feature repeating the step of selecting, before attempting to acquire and register with the selected wireless communications system in order to enhance system performance to continuous to locates acceptable service provider in no optimal providers are found as taught by Bamburak et al. The combination of Mazzara and Bamburak et al do not specifically teach indetail corresponding avoidance criterion that is equal to a current time plus avoidance duration for not using the wireless communications system.

In the same field of endeavor, Huilgol teaches corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system (col. 3, line 66-col. 4, line 5, col. 7, lines 24-41, col. 8, line46-col. 9, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Mazzara and Bamburak et al by specifically adding feature corresponding avoidance criterion that is equal to a current time plus an avoidance duration time for not using the wireless communications system in order to enhance system performance, the possibility of in completion of call is reduced, by increasing the communication system in which the call is attempted, thereby reducing call congestion, or other communication difficulties in the system as taught by Huilgol.

Regarding claim 2 Mazzara teaches wherein each system identifier identifies at least one wireless communications system (para. # 0044-45 see above).

Regarding claim 3 Mazzara teaches wherein each wireless system identifier includes a frequency (para. # 0044-0045 see above).

Regarding claim 4 Mazzara teaches wherein each wireless system identifier includes a SID/NID pair that uniquely identifies a wireless communications system (para. # 0044-0045 see above).

Regarding claims 5,23 Mazzara teaches detecting a communications failure with a wireless communications system and adding a new entry to the list of unusable wireless communications systems, the new entry including an identifier of the failed wireless communications system and corresponding avoidance criterion (para. # 0040-0045, 0054-0056, see above).

Regarding claims 6,24 Mazzara teaches assigning an avoidance duration to the detected system failure and calculating an avoidance time before which the failed wireless communications system is unusable, the avoidance time equal to a current time plus the avoidance duration, wherein the avoidance criterion includes the avoidance time (para. # 0038, 0039, 0067 see above).

Regarding claim 7 Mazzara teaches wherein the avoidance criterion is satisfied if the stored avoidance time is greater than the current time (para. # 0038, 0039, 0067 see above).

Regarding claim 8 Mazzara teaches maintaining a list of detectable wireless communications failures, each detectable wireless communications failure having a corresponding avoidance duration; locating the detected system failure in the list of

wireless communications failures; and using the corresponding avoidance duration in the step of calculating (para. # 0038,0039,0055,0067 see above).

Regarding claim 9 Mazzara teaches wherein the step of detecting includes the step of detecting failed attempts to acquire and register with the selected wireless communications system (para. # 0038,0039,0055,0067 see above).

Regarding claim 10 Mazzara teaches wherein the steps of selecting and attempting are repeated until the mobile device successfully acquires and registers with the selected wireless communication (para. # 0038,0039,0055-0056,0067 see above).

Regarding claim 11 Mazzara teaches wherein the wireless communications systems are selected from the preferred systems list in a predetermined order of desirability (para. # 0038, 0039, 0055-0056, 0067 see above).

Regarding claim 13 Mazzara teaches wherein each system identifier identifies at least one wireless communications system (para. # 0038, 0039, 0055-0056, 0067 see above).

Regarding claim 14 Mazzara teaches detecting a communications failure with a wireless communications system and adding a new entry to the list of unusable wireless communications systems, the new entry including an identifier of the failed wireless communications system and corresponding avoidance criterion (para. # 0038, 0039, 0052-0056, 0067 see above).

Regarding claim 15 Mazzara teaches assigning avoidance duration to the detected system failure and calculating an avoidance time before which the failed

wireless communications system is unusable, the avoidance time equal to a current time plus the avoidance duration, wherein the avoidance criterion includes the avoidance time (para. # 0038, 0039, 0052-0056, 0067 see above).

Regarding claim 16 Mazzara teaches wherein the avoidance criterion is satisfied if the stored avoidance time is greater than the current time (para. # 0038, 0039, 0052-0056, 0067 see above).

Regarding claim 18 Mazzara teaches detecting a communications failure with a wireless communications system and adding a new entry to the list of unusable wireless communications systems, the new entry including an identifier of the failed wireless communications system and corresponding avoidance criterion (para. # 0038, 0039, 0052-0056, 0067 see above).

Regarding claim 19 Mazzara teaches assigning avoidance duration to the detected system failure and calculating an avoidance time before which the failed wireless communications system is unusable, the avoidance time equal to a current time plus the avoidance duration, wherein the avoidance criterion includes the avoidance time (para. # 0038, 0039, 0052-0056, 0067 see above).

Regarding claim 20 Mazzara teaches maintaining a list of detectable wireless communications failures, each detectable wireless communications failure having corresponding avoidance duration; locating the detected system failure in the list of wireless communications failures; and using the corresponding avoidance duration in the step of calculating (para. # 0038, 0039, 0052-0056, 0067 see above).

Regarding claim 21 Mazzara teaches wherein processing circuitry is further adapted to delete an entry from the list of unusable communications system when the corresponding avoidance time is than the current time (para. # 0038, 0039, 0052-0056, 0063, 0067 see above).

Response to Arguments

4. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is (571)272-7909. The examiner can normally be reached on 9 am to 6.30 pm Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

Khawar Iqbal
Examiner
Art Unit 2617